

Appl. No. 09/879,451
Amdt. Dated September 1, 2004
Reply to Office action of July 1, 2004
Attorney Docket No. P14636-US1
EUS/JIP/04-4000

REMARKS/ARGUMENTS

Claim Amendments

The Applicant has amended claims 1, 6, 8-10 and 13; claims 5 and 12 have been canceled. Applicant respectfully submits no new matter has been added. Accordingly, Claims 1-4, 6-11 and 13-16 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

Examiner Objections – Drawings

The Drawings were objected to because in Figure 2, includes the following reference sign(s) not mentioned in the description: "MGW, CIC150". A Submittal of Drawing Replacement Sheet(s) containing the correction "MGW₂, CIC150" is being filed concurrently herewith under a separate cover. For your convenience, a copy of that filing is attached.

Claim Rejections – 35 U.S.C. § 103 (a)

Claims 1-7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ho et al. (US 6,091,953 hereinafter Ho) in view of Stumpert (WO 01/13657 hereinafter Stumpert) and Anquetil et al. (*Media Gateway Control Protocol and Voice over IP Gateways*, hereinafter Anquetil). Claim 5 has been canceled rendering moot the rejection of that claim. The limitations of claim 5 have been incorporated into claim 1.

The present invention discloses a solution for utilizing available, non-dedicated circuits between Base Station Controllers (BSCs) and a Mobile Station Controller (MSC) pool in a network having a plurality of media gateways (Page 3, para 6). The Applicant's invention discloses a Media Gateway Selection Node (MGWSN) for connecting the BSCs and MSCs via non-dedicated circuits. The MGWSN utilizes a database, MGWDB to provide a central means for pooling and controlling circuits in the core network so that dedicated circuits are not required between the BSCs and MSCs. It is important to note that the Applicant's invention utilizes media gateways between an MSC and a BSC and a MGWSN to coordinate the connections. The MGWSN checks the MGWDB for a

Appl. No. 09/879,451
Amdt. Dated September 1, 2004
Reply to Office action of July 1, 2004
Attorney Docket No. P14636-US1
EUS/J/P/04-4000

circuit that is not busy to connect an MSC via a media gateway to a particular BSC. The database contains the circuit relationships with the MSCs and the BSCs and the focus is on circuits that are available.

The Applicant respectfully directs the Examiner's attention to claim 1.

1. (Previously Presented) A telecommunications network, providing non-dedicated circuit pathways between access nodes and switches in the network, comprising:

a plurality of access nodes disposed about a service area of the telecommunications network;

a switch pool adapted to communicate with the access nodes in order to provide access by a plurality of user terminals to services of the telecommunications network;

at least two media gateways providing one or more connections between the access nodes and the switch pool via a plurality of circuit pathways; and

a media gateway selection node operably coupled to the media gateways and the switch pool, the media gateway selection node configured for connecting a switch and a target access node and comprising means for:

checking a data structure, coupled to the MGWSN, wherein relationships between circuit pathways and associated identity codes, media gateways and access nodes are stored;

selecting the media gateway;

allocating a particular circuit pathway between [[a]] the switch and [[a]] the target access node, by wherein said allocating step comprises:

allocating [[a]] an available, non-dedicated circuit pathway between the switch and the selected media gateway; and

allocating [[a]] an available, non-dedicated circuit pathway between the selected media gateway and the target access node

and

upon termination of communications between the switch and the target access node, the switch informing the MWGSN that the call is released and the circuit pathway between the switch, the media gateway and the target access node is released and the database is updated.
(emphasis added)

Respectfully, the Applicant asserts that neither Ho nor Stumpert nor the Anquetil reference teaches or suggests the above-emphasized limitations.

The Ho reference appears to disclose a communication system for distributing signaling messages in a scalable wireless network. A dispatching switch couples the

Appl. No. 09/879,451
Amdt. Dated September 1, 2004
Reply to Office action of July 1, 2004
Attorney Docket No. P14836-US1
EUS/JIP/04-4000

base station system (BSS) to the plurality of mobile switching centers (MSC) and is responsible for assigning the mobile units to the MSCs. The dispatching switch assigns each mobile unit to an MSC so as to equalize loading among the MSCs and also routes communications between the BSS and the MSCs (Col. 6, lines 7-15). In other words, the dispatching switch determines the loading on the MSCs and assigns mobile units to the appropriate MSC to distribute the load.

In the Detailed Action, the MGWSN of the Applicant's invention is equated to the dispatching switch of Ho. As noted above, Ho positions the dispatching switch between the BSCs and the MSCs. The dispatching switch routes communications between base station subsystems and the MSCs. (Col 5, lines 20-23, Col. 6, lines 1-11). In the Applicant's invention, the MGWSN checks a MGW selection database to determine an available (non-busy) circuit between the switch and the access node. The MGWSN routes the connection between the MSC and BSC via a media gateway, also selected by the MGWSN. Ho, in contrast, routes the connection directly between the MSC and BSS.

The MGWSN provides a central means for pooling and controlling circuits in the core network such that no dedicated circuits between the BSCs and MSCs are required. In addition, an individual MSC can be added or removed from the MSC pool without the BSCs being aware of the change. The MGWSN has at its disposal the Media Gateway Selection Database (MGWSDB), which it consults in order to identify an available circuit path between a particular BSC, a selected media gateway and a MSC in the MSC pool. The purpose and focus of the invention is to find a circuit pathway that is not being used as opposed to the dispatching switch of Ho that picks a MSC that is not busy so as to balance the load on the MSC pool.

As disclosed in the Applicant's invention, each circuit pathway typically has an associated Circuit Identity Code (CIC) stored in the MGWSDB. The MGWSN selects the available circuit path identified by a unique CIC, reserves the available CIC and also selects a Media Gateway (MGW). The MGWSN returns the identity of the MGW and the identity of CIC, to the requesting MSC. A connection is made using the available CIC

Appl. No. 09/879,451
Amdt. Dated September 1, 2004
Reply to Office action of July 1, 2004
Attorney Docket No. P14636-US1
EUS/JIP/04-4000

from the requesting MSC to the selected MGW and to the associated BSC. (Page 7-8, para. 23).

The Stumpert reference is cited only for teaching a network having at least two gateways. Stumpert appears to disclose a method for separating call control and bearer control signals. Bearer control relates to controlling selection of a path through the transmission network and utilizing the required resources. Call control relates to subscriber and service control. It is respectfully submitted that the Stumpert reference does not address the above-identified deficiencies of Ho with respect to the Applicant's Invention. The combination of the Ho and Stumpert references fails to teach a media gateway selection node that chooses and implements non-dedicated circuit pathways between an access node, a media gateway and a switch. In addition, Applicant submits that there is no suggestion or motivation in either Ho or Stumpert to combine the references to teach the claimed invention.

The Anquetil reference is cited for having a media gateway controller, which reads on the Media Gateway Selection Node. The Applicant will accede to the Examiner's interpretation of the referenced passages in Anquetil as the Anquetil reference is missing from the Applicant's files and not available for reference.

The Applicant respectfully submits that the Ho reference does not disclose (directly or inherently) the emphasized limitations in amended claim 1; that of utilizing a media gateway selection database for choosing gateways and allocating available non-dedicated circuits between the gateways and the MSCs and between the gateways and the access nodes to provide a complete connection between the access node and the MSC. Claims 2-4 and 6-7 depend from claim 1 and contain the same limitations. The Applicant respectfully requests the withdrawal of the rejection of claims 1-4 and 6-7.

Claims 8-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ho in view of Anquetil. In order to expedite allowance of this application, the Applicant has canceled claim 12 without prejudice. Therefore, this rejection with respect to this claims is deemed to be moot. The Applicant has amended claims 8-9, 10 and 13 to

Appl. No. 09/879,451
Amdt. Dated September 1, 2004
Reply to Office action of July 1, 2004
Attorney Docket No. P14836-US1
EUS/JIP/04-4000

better define the intended scope of the claimed invention. The Examiner's consideration of the amended claims is respectfully requested.

As between claim 1 and the Ho and Anquetil references, the Applicant submits that amended claims 8 and 13 contain limitations analogous to those found in claim 1. For the above given reasons the Applicant respectfully submits that claims 8 and 13 are patentable over the Ho and Anquetil references. The Applicant respectfully requests withdrawal of the rejection of claims 8 and 13 and the respective dependent claims, claims 9-11 and 14-16.

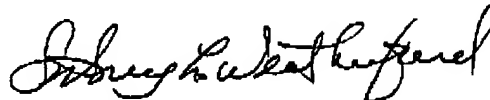
Appl. No. 09/879,451
Amdt. Dated September 1, 2004
Reply to Office action of July 1, 2004
Attorney Docket No. P14636-US1
EUS/JIP/04-4000

CONCLUSION

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for all pending claims.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



By Sidney L. Weatherford
Registration No. 45,602

Date: September 1, 2004

Ericsson Inc.
6300 Legacy Drive, M/S EVR 1-C-11
Plano, Texas 75024

(972) 583-8656
sidney.weatherford@ericsson.com